**MBU Rotation Guide for MS3’s**

- If you are the FIRST student rotating on the MBU (first 2 weeks of the pediatric clerkship) please go to the MBU 13th floor nursery after Miller Rounds are done and page the peds intern in the MBU. You must scan your badge (near the phone) to gain access to this locked unit.

- If you are the SECOND student rotating on the MBU (last 3 weeks of the pediatric clerkship) please arrive in the MBU 13th floor nursery at 0730 on Monday to meet your intern and start completing charts for the day. You must scan your badge (near the phone) to gain access to this locked unit.

The Mother Baby Unit (MBU) is generally a happy place in the hospital. Most of the time, the mothers and babies who are in this unit are healthy. Our job as pediatricians in the unit is to efficiently gather maternal historical data and perform physical examinations of the babies to ensure they are healthy and ready to go home. Just as importantly, though, we also play a significant part in teaching new parents about their newborn, pointing out normal variations and ways to care for their new baby. We are a multidisciplinary team including MDs, RNs, Lactation Nurses, Case Managers, CNAs and Health Unit Coordinators.

Sometimes, we discover minor problems with a newborn that need further thought/workup. Sometimes, we discover major problems that need immediate attention. Thankfully, this is rare.

**Your job as the MS3 on this rotation is to:**

1. Learn as much as you can about newborn history and physical examination. By the end of the rotation, we want you to feel comfortable examining a newborn.
2. Be able to recognize signs or symptoms that may indicate underlying medical problems (e.g., tachypnea, hypothermia, murmurs, hypoglycemia, etc)
3. Read. There is a big binder full of readings that will provide many hours of self-directed learning. Feel free to copy the articles for your personal use. You should read as many of these articles as possible during your MBU rotation.

**Additional specific requirements:**

4. Observe at least one lactation consultation with the lactation RN on the unit. Please contact one of the lactation nurses to arrange for a time in the afternoon for you to accompany her during a full visit.
5. Observe a RN performing a hearing screen on a newborn and learn how it works.
6. You are expected to create a handout during your rotation. You have 2 choices regarding the audience for this handout. They are:
   - a. Create a parent handout (in lay language) about a common newborn issue. In the past, students have created handouts on jaundice, breastfeeding FAQs, cryptorchidism, dacryostenosis, newborn rashes, ABO incompatibility and other hemolytic jaundice, and postpartum depression.
   - b. Alternatively, you may choose to create a 1-2 page handout for the medical providers researching a more complicated topic (i.e., the identification, workup, treatment and prognosis of a baby whose mother had syphilis). The handout is primarily for your educational value in researching a topic relevant to newborns in the MBU. You should
give a copy (or email it) to the attending/resident you work with during your rotation, and you may wish to teach the team about the information/knowledge you’ve learned.

Your handout should be attached to an email sent to Tracy Bumsted, MD, and it should include the references you used at the bottom of it. It is due no later than 5pm on the last day of the clerkship.

7. Your attending or resident may ask you to give a brief talk to the team on a newborn medicine topic of your choice. Please discuss this with your team after you start the rotation.

Some few helpful hints:

- Babies with their date/time of birth written in red on the board belong to OHSU family practice (not us). All other babies are cared for by the pediatric team (us).
- If a mom is GBS positive, look in her MAR to see what abx and how many doses she received.
- Learn how to tell which kids will go home that day (“de” is written on board, or red check mark).
- When examining babies in their room, try to use natural light to assess jaundice. If you think you want a serum bilirubin ordered, guess what the level will be before you get the results.
- Notice lots of variations of normal on exams.
- Ask questions if you aren’t sure.
- Ask parents if they have questions. Don’t feel like you have to know all the answers. It’s OK to say, “I’ll check on that and get back to you.”
- Pay attention to the % weight loss for babies each day and especially those going home. Up to 7-10% is normal, more than this is excessive and a baby may need to be supplemented with formula if weight loss is >10%.
- Ask parents on the first day who their pediatrician or clinic will be and make sure you ask the intern to add this to the discharge summary (see chart documentation below).
- If a baby is brought out of the mother’s room into the main nursery for evaluation, don’t leave them alone.
- Get comfortable changing diapers and swaddling babies in blankets.
- Ask the Attending and/or Intern to teach you if you have questions.
- Try to keep the nurses happy. Be flexible!

First thing to do every morning:
To get to the MBU baby census and charts easily, once you’ve logged into EPIC, select “Patient Lists” on the top. You will see a big yellow folder on the left “Shared Patient Lists”. Click once on the “MBU Infants Whiteboard” and all the infants admitted to both 13th and 14th floors will appear. You can print this census list every morning by right clicking on this page. It is helpful to have a paper list to refer to during rounds. Be aware that some of the babies on the unit (and on this census list) may belong to OHSU Family Medicine (those with FM attending providers) so do not pre-round or enter any information on these babies while you are on the pediatric rotation.

Chart documentation (0700-0830):
All newborn information should be entered into the baby’s EPIC chart. In order for you to be fully functional, you must have EPIC access and be able to use several smart phrases. The medical student’s ability to “SHARE” notes was eliminated, which means that for all your chart documentation, you must either accept, pend (no one can see this except you) or cancel the notes you author.
PATIENT SUMMARY REPORTS YOU SHOULD ADD TO YOUR VIEW:

Delivery Summary - Baby: When you are in a baby’s EPIC chart, select the “Patient Summary” option at the far left which has several different reports that can be displayed. Click on the magnifying glass to the far right, choose “OHSUPOBDELIVERYSUMMARY(BABY)” report called “Delivery B”. When this is displayed, click on the wrench to the right of the magnifying glass, choose “Add current” then “Accept”. The baby’s delivery summary should then appear on the top of the Patient Summary for all babies from then on. This report has useful information about the date and time of delivery, the type of delivery, and any resuscitation that was required, the Apgar scores at 1 and 5 minutes, and scrolling down you should be able to view maternal labs (purple if obtained at OHSU, black if they were obtained externally at an outside clinic). There is a useful link to the mother’s EPIC chart at the very top of this delivery summary for the baby.

Delivery Summary – Mother: Another report helpful to have on your Patient Summary is “OHSUPOBDELIVERYSUMMARY(MOM)” and this is called “Delivery M”. There is additional information about the mother contained in this report, which may need to be added to the baby’s chart.

MBU Newborn Report: This is a very good “accordion” report that is helpful to have on your Patient Summary. The “OHSUIPACCORDIONMOTHERBABY” report can be added the same way as described above. It is a nice compilation of previously recorded information (mostly nursing documentation) about the baby, and has a section for vital signs, daily weight, whether the baby has urinated or stooled, any transcutaneous bilirubin values obtained, and some medications that have been given, among other things. You will find this useful when you are pre-rounding on your babies in the morning.

OTHER EPIC INFORMATION:

History: Select the History button on the far left, and then under Specialty, select “Birth History”. This is where you will find some historical information about the baby. Anything that could possibly affect the baby should be entered in this area, including the free text box (i.e., maternal medical and/or psychiatric conditions, medications taken during pregnancy, ultrasound results, etc). Maternal labs include: Her blood type, Antibody screen, GC, CT, HIV, RPR, HepBsAg, Rubella, glucose testing and GBS status. Sometimes, PPDs or CXRs are reported as well.

The Discharge Summary “note” is the most important document for the baby because it contains all the historical information for the mother’s pregnancy, as well as all the important information for the baby over the course of the hospitalization. This note is ultimately the main piece of chart documentation given to the baby’s future pediatrician/PCP. However, as a medical student you cannot create this note because it is a document (it is not a “note” in the traditional sense) and it will be changing over the entire hospital stay for the baby as we continually add to it until the baby is ready for discharge. Because the medical student “share” function for notes has been removed, you should not create the discharge summary note or add to it during the hospital stay because you will only have the option to “Accept” or “Cancel” your changes which will finalize the note prematurely. We have developed a work-around for this problem so that you are able to fully contribute the initial information on this document for the babies who you are caring for primarily. For a new baby who has just been born within the past 24 hours whom you are assuming primary responsibility (ask your intern which babies you should follow), once you double click the baby’s chart, click on the “Action” drop down menu at the top of your EPIC screen. Select “Discharge”, then select “Patient Inst”. Here you will see a blank text box (that will eventually be used by the RN for patient instructions when the baby is ready for discharge). We use this as an area of EPIC where you, as a student, can create the information that will be the Discharge Summary note.
Once you have selected “Patient Inst”, click in the open text box, and use the dot phrase:

`.mbudischargesummary`

By doing this, much of the information for this note will be automatically pulled into the proper format. Any maternal historical parts with a *** needs to be added by you prior to seeing/examining your baby for the first time. The dot phrase doesn’t pull in birth time; whether the baby was born term (37-42 weeks), preterm (<37 weeks), or post-term (>42 weeks); whether the baby’s weight is AGA, SGA, or LGA; or the type of delivery (NSVD, C/S, forceps-assist, etc). Also, you will need to find the date of the mother’s prenatal ultrasound, along with the results of the anatomic survey. OBs will often use US for dating, but the pediatrics are mainly interested in the baby’s internal anatomy. Sometimes this information is found in the mother’s delivery summary, or in her EPIC chart under “chart review – imaging” tab. If the mother received her prenatal care outside of OHSU, her prenatal US result will often be in her hard chart at the front desk. If you are missing some of the mother’s prenatal information and have not been able to find it either in EPIC or in her hard chart, as a last resort you can call the clinic where she received her prenatal care and ask them to fax the mother’s missing information to you at the unit (ask the HUC what the fax number is). It is important to understand that any missing maternal information must be obtained ASAP after the baby is born to properly care for the newborn. Your effort at tracking this information down will be very helpful to the pediatric providers and is much appreciated!

Once you have completed what you can on the DC summary (within the patient instructions section), tell your intern so that s/he can copy and paste that information into a DC summary note and “share” it with the team for the remaining hospitalization. Again, once this is done, you cannot add further to the note, since you must either accept or cancel it, but you can relay information you would like to add to the intern, who can add it. Finally, once the DC Summary note has been created by the intern, you should go back into the “Patient instructions” section and delete the information you have placed there.

**Daily documentation**: you will be responsible for creating daily notes for all the babies you are following. Discuss with your intern which babies you should follow and proceed with gathering information (above) for these babies. When you are ready to examine your patient, look at the baby’s vitals, meds, and read any other notes in the Notes section. Then, go into the room and introduce yourself to the parent(s) as the student on the rotation and ask how the mother is doing. If the PCP for the baby is not indicated in your chart review, ask the parent(s) where they plan to take their baby for f/up care after discharge, as this will help facilitate discharge planning. Explain your role on the team and ask if you can examine their baby. If they agree, thoroughly wash your hands and do a full newborn exam, using gloves to examine the palate. When you are done, explain that you will return with the team later that day.

For all your daily progress notes (admit, subsequent, discharge), assign your attending as the cosigner. You should ask your intern to share any dot phrases with you that you do not see in your view. Most of them are system-wide so do not need any special permission.

For Admits (first day baby has been seen after birth) – once all the history has been gathered and you have examined your patient, you can start your daily note for the baby. Go to “Notes” button on the far left. Select the yellow “H+P” tab in the middle, then select “New Note”. In this blank field, type the smart phrase “`.mbuadmit`” which will bring up the template we use for a first day exam. Go through this note, changing or adding your exam findings and any assessment and plan you have that may differ from the standard “routine care” phrase listed. Once you are finished with your note, click “Accept”. If you have questions and need further clarification, click “Pend” which will allow you to finalize details before you accept it. All your daily notes should be done by the time rounds start after Morning Report.

For Subsequents (baby has already been seen at least once before by pediatric providers) – same as above only you will use a different dot phrase (see below). Review the discharge summary note (don’t double click into it though) to refresh your memory about the details of the delivery, and read over the previous
admit/subsequent note, etc. Examine your baby as above, and then create a progress note for the day by selecting the yellow “Prog Note” tab and then select “New Note.”

- If the baby (and mother) will stay another day and NOT discharge, use the template “mbusub”
- If the baby (and mother) will go home that day, use the template “.mbudis”

The notes will automatically bring in the daily weight and calculate the % weight loss from birth, but you can also get this information by typing .dailyweight

The results of the baby’s hearing screen can be added by typing .hearing screen

For all of your notes, please be sure to add your assessment and plan, addressing any problems or concerns that are present. Do not rely on the standardized template A/P for babies that have issues!

**Preparing for Discharge:**

- Providing parents with the “Care of Your Newborn” handout will be important during the stay but can be explained at any time convenient (not necessarily during rounds). These sheets are located in the central nursery rooms and we have them in a variety of languages. Take advantage during some of the “down time” in the afternoons to teach parents the information on this sheet prior to discharge the following day(s). It is ideal to give the parents the sheet to read over on day 1 or 2, and then return later in an afternoon prior to discharge to discuss the information and answer any questions they have. If the parents do not speak English as their primary language, you will be expected to retrieve a speaker phone and use an interpreter to do this teaching. This allows you to be the primary communicator with the parents of the babies you are following.
- All babies need to have UOP and SOP documented before they can leave the hospital (find this in MBU Newborn accordion report in Patient Summary).
- The newborn screen as well as hepatitis B vaccine is documented by the RNs (found under the “Action” drop down menu, then in the “Imm/Injections” section.)
- The medications routinely given include erythromycin eye ointment and vitamin K injection (found in the MAR report, tab on far left.) Click on the green time in the report to see comments below which indicate “given” or “not given”.

**Daily Schedule:** you should plan on arriving to the unit at 0700 to help the intern with transferring maternal data into the baby’s EPIC chart for all new babies born since the day before. Discuss with your intern which babies you will follow and pre-round on them prior to AM report (0830). Try to complete all your written notes before that time so you will be fully prepared for Attending rounds after AM report.

- **0700-0820:** Intern and students pre-round. Students gather EPIC information, see and examine all the babies they are following, complete notes prior to AM report.
- **0830-0900:** AM report in CDRC 3200 (except for Thursdays-- Grand Rounds in DCH Auditorium on 11th floor from 0800-0900).
- **0915-1145:** Attending (bedside) rounds with entire team, discharges seen first, followed by new admits, then subsequents.
- **1200-1300:** Intern noon conference and required MS3 core lecture series (rarely 2 lectures back to back until 1400 or later, please check daily schedule.)
- **Afternoons:** continue rounding until all babies have been seen by attending. Structured teaching (didactics) often occur in the afternoons, including your talk to the team. Your intern will have
continuity clinic one afternoon, so you should discuss any issues that arise with the attending directly. After core lectures, you can return to the unit and complete EPIC documentation for babies who have been born since the morning list was printed and this is also a great opportunity to spend a little more time with your families from the morning. You can provide anticipatory guidance to the “subsequent” parents who may be discharging the following day, or may need extra time to ask questions. This is also a great opportunity to follow up on any issues brought to light during the morning rounds.

- You and the intern should sign out any babies who may need attention after you leave for the night to the DNCC (NICU) peds intern as they will cross-cover these babies at night.

- Have fun and enjoy learning newborn medicine!